wherein the solid-liquid separation performed after the cooling crystallization includes press filtration.

- 11. (New) The manufacturing method according to Claim 10, wherein the mixture containing dimethylnaphthalenes is a mixture composed of dimethylnaphthalene isomers.
- 12. (New) The manufacturing method according to Claim 10, wherein the press filtration is performed at a pressure of 10 kg/cm² or more.
- 13. (New) The manufacturing method according to Claim 10, wherein the mixture containing dimethylnaphthalenes used as a feedstock includes 5 wt% or more of 2,7-dimethylnaphthalene.
- 14. (New) The manufacturing method according to Claim 10, wherein the cooling crystallization is performed for a mixture containing dimethylnaphthalenes which includes less than 25 wt% of 2,6-dimethylnaphthalene.
- 15. (New) The manufacturing method according to Claim 10, wherein the washing step is performed for a solid component containing 80% or more of 2,6-dimethylnaphthalene using a solvent, and further comprising steps of performing solid-liquid separation and distillation after the washing step, whereby a 2,6-dimethylnaphthalene having a high purity of 99% or more is obtained.
- 16. (New) The manufacturing method according to Claim 10, wherein the solvent used in the washing step is an aliphatic hydrocarbon and/or alicyclic hydrocarbon having 5 to 10 carbon atoms.
- 17. (New) The manufacturing method according to Claim 10, wherein the press filtration is performed using a tube press.
- 18. (New) A method for manufacturing highly pure 2,6-dimethylnaphthalene comprising: a step of performing cooling crystallization of a mixture containing

dimethylnaphthalenes which includes 2,6-dimethylnaphthalene; a step of performing solid-liquid separation to obtain a solid component; and a washing step of washing the solid component using a solvent; wherein the washing step is performed at least twice, and a part or the entirety of a mother liquor obtained in a second washing step or in a subsequent washing step is used as a solvent in a washing step performed prior to the washing step at which the mother liquor is obtained.

- 19. (New) The manufacturing method according to Claim 17, wherein the mixture containing dimethylnaphthalenes is a mixture composed of dimethylnaphthalene isomers.
- 20. (New) The manufacturing method according to Claim 17, wherein the press filtration is performed at a pressure of 10 kg/cm² or more.
- 21. (New) The manufacturing method according to Claim 17, wherein the mixture containing dimethylnaphthalenes used as a feedstock includes 5 wt% or more of 2,7-dimethylnaphthalene.
- 22. (New) The manufacturing method according to Claim 17, wherein the cooling crystallization is performed for a mixture containing dimethylnaphthalenes which includes less than 25 wt% of 2,6-dimethylnaphthalene.
- 23. (New) The manufacturing method according to Claim 17, wherein the washing step is performed for a solid component containing 80% or more of 2,6-dimethylnaphthalene using a solvent, and further comprising steps of performing solid-liquid separation and distillation after the washing step, whereby a 2,6-dimethylnaphthalene having a high purity of 99% or more is obtained.
- 24. (New) The manufacturing method according to Claim 17, wherein the solvent used in the washing step is an aliphatic hydrocarbon and/or alicyclic hydrocarbon having 5 to 10 carbon atoms.